

**SITE PREPARATION WORK PLAN
FOR AREA 1, PHASE II
SOIL CHARACTERIZATION AND EXCAVATION
PROJECT**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO**



INFORMATION
ONLY

AUGUST 1998

**U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE**

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Attachment I Summary of Modifications Since November 1997 A1PII Submittal

Attachment II Schedule

LIST OF ACRONYMS AND ABBREVIATIONS

A1PI	Area 1, Phase I
A1PII	Area 1, Phase II
CA	Certified Area
CFC	certified for construction
CU	certification unit
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FC&DP	Facilities Closure and Demolition Project
FDF	Fluor Daniel Fernald
FEMP	Fernald Environmental Management Project
IRD	Integrated Remedial Design Package
MTL	material tracking location
OEPA	Ohio Environmental Protection Agency
OSDF	On-Site Disposal Facility
STP	Sewage Treatment Plant
SWMP	Surface Water Management Plan
SWU	Southern Waste Units
WAC	waste acceptance criteria

1.0 INTRODUCTION

1.1 PURPOSE

This Site Preparation Work Plan describes:

1. Distinction from the Implementation Plan for Area 1 Phase II (A1PII) Soil Characterization and Excavation Project (DOE 1997a).
2. Scope and implementation of the Site Preparation package for A1PII.
3. Schedule.
4. Summary of modifications since the A1PII Integrated Remedial Design Package (IRDP) was submitted in November 1997 (see Attachment I).

1.2 BACKGROUND

A1PII remediation was originally proposed as a single IRDP in November 1997 for the U.S. Environmental Protection Agency (EPA)'s and Ohio EPA (OEPA)'s 90% Design Review. That single package was anticipated to be performed by two contractors: a site preparation/excavation contractor and a specialty contractor for the stabilization of lead-contaminated soil in the Trap Range. The November 1997 IRDP consisted of:

1. Implementation Plan (DOE 1997a)
 - a. Design Criteria Package
 - b. Predesign Investigation Supporting Information
 - c. Surface Water Management Plan (SWMP)
 - d. Systems Plan
 - e. A1PII Structures and Facilities
 - f. Integrated Measurement Approach for Remediation of A1PII
 - g. Earthwork and Impacted Material Calculations
2. Construction Drawings
3. Technical Specifications

However, as summarized during the Fernald Environmental Management Project (FEMP) Soil Progress meeting discussions between the EPA, OEPA, and the U.S. Department of Energy (DOE) on February 12, 1998, and April 7, 1998, the Site Preparation portion of the A1PII remediation work was broken out into a separate package. Site Preparation work consists almost exclusively of earthwork

activities conducted within certified areas. Under the original IRDP submittal, this work would be delayed as additional predesign investigation activities, particularly concerning technetium-99 delineation within the Sewage Treatment Plant (STP) occurred. Other reasons for the separation include the potential use of an existing on-site construction contractor (i.e., modifying an existing contract) or defining the scope for a distinct portion of work (i.e., earthwork activities) to utilize an Invitation for Bid versus a Request for Proposal to improve the procurement schedule. Attachment I summarizes the modifications to the Site Preparation portion of the November 1997 IRDP to date.

A letter from DOE to EPA (DOE-0679-98, Reising to Saric and Schneider, "Planned Implementation Strategy for the A1PII Soil Characterization, Excavation and Certification Activities," dated April 13, 1998) provided a follow-up to the discussions and outlined the revised A1PII implementation strategy as five separate packages:

1. Site Preparation
2. STP Excavation
3. Trap Range Remediation
4. Area 1, Phase I (A1PI) Sedimentation Traps Certification
5. STP Backfill Borrow Area

As part of the April 13, 1998 letter, a list of the proposed submittals and submittal dates were provided for each package. For Site Preparation, this work plan, in addition to pre-certified for construction (pre-CFC) construction drawings and technical specifications, revised A1PII Design Criteria Package, and revised SWMP are to be provided.

The Certification Report for Area 1 Phase II - Sector 1, 2a, and the Conveyance Ditch (DOE 1998a) shows the areas to be certified for both On-Site Disposal Facility (OSDF) borrowing activities and for A1PII Site Preparation activities. Results from the sampling effort are outlined in the Certification Report. DOE considers that the remedial goals, as established in the Operable Unit 5 Record of Decision within these areas, have been achieved. As illustrated in the Certification Report, the Site Preparation excavations will occur in certification units characterized for reuse, with any exceptions noted in Section 3.3 of this work plan.

2.0 DISTINCTION FROM THE A1PII IMPLEMENTATION PLAN

This A1PII Site Preparation Work Plan is an interim plan to document changes to the previously submitted A1PII IRDP, and will present current approaches to update the agencies during the IRDP revision stages. This work plan is intended to summarize the Site Preparation work. When applicable, the information provided within will be used to supplement the current revision of the A1PII Implementation Plan and incorporate relevant draft responses to both EPA and OEPA comments on the November 1997 IRDP submittal. The complete formal responses to comments will be transmitted along with the revised Implementation Plan for the STP excavation package.

Additionally, the Site Preparation Construction Drawings and Technical Specifications, Design Criteria Package, and SWMP are referenced within this work plan to avoid unnecessary duplication of information. As STP Excavation and Trap Range Remediation design work continues, the Design Criteria Package and SWMP, to be submitted with the Site Preparation Package, will be revised.

3.0 SCOPE AND IMPLEMENTATION OF THE SITE PREPARATION PACKAGE

As discussed in the A1PII SWMP, the scope of the Site Preparation work is to provide a surface water management system, including construction of ditches, conveyance channels, a sedimentation basin and trap, and culvert construction within Sector 1 and Sector 3 prior to STP Excavation and Trap Range Remediation, within certified areas characterized for reuse, except where noted below. The implementation of the Site Preparation work includes:

- Preliminary Activities
- Site Preparation Work Area Preparation
- Excavation and Installation of Structures
- Material Handling
- Seeding Activities

3.1 PRELIMINARY ACTIVITIES

Certain activities will be completed in Sector 1 before Site Preparation contract award.

Certification rope fencing and signs have been installed for access control (Sheet G0010). Formal access protocols have been established through FDF Site Procedure EP-0008, "Access to a Certified Area (CA)," which applies to all FEMP and contractor personnel seeking access into a CA.

Since agency approval of the Certification Report in June 1998, the OSDF Phase II contractor has constructed a haul road and began excavation within the A1PII Sediment Basin footprint (Sheet G0003) for OSDF borrowing activities. The OSDF Phase II contractor has established working piles, from the excavation and screening operations to the south of the basin, and is hauling the screened material over a new road within the Borrow Area Haul Road Corridor to bridge uncertified areas in Sector 2 and Sector 3.

In addition to the product submittals required as specified in the technical specifications, the Site Preparation contractor will also be required to submit the following documents for DOE approval after the Notice of Award:

- Safe Work Plan
- Traffic Plan
- Dust Control Plan (per FDF RM-0047 "Fugitive Dust Control Requirements")

- Earthwork Work Plan
- Construction Quality Assurance Plan

By the time the Site Preparation contractor has been given the Notice to Mobilize, the OSDF Phase II borrow activities are expected to be complete. Approximately one foot of excavation will remain (Sheet G0006) at the A1PII Sediment Basin Footprint for the Site Preparation contractor to execute. The Site Preparation contractor will establish office space in an uncertified area (to be determined prior to the Notice of Award and submitted to DOE for approval).

3.2 SITE PREPARATION WORK AREA PREPARATION

Work area preparation activities include:

- Establishing site boundaries and controls
- Surveying
- Establishing erosion and sediment controls
- Site preparation

3.2.1 Establishing Site Boundaries and Controls

As previously described, access controls will have been installed before contract award. Any additional fencing, signs, barriers, or equipment access points beyond those already established for the certified areas will be installed as shown on the construction drawings or as directed by the Fluor Daniel Fernald (FDF) Construction Manager.

3.2.2 Surveying

Initial Site Preparation activities will include locating and marking (Specification Section 02050) the pertinent control boundaries, including underground utilities and features (e.g., monitoring wells) that are to be protected or removed, verifying existing conditions, establishing excavation limits, and noting features to be installed (e.g., culverts, ditches, roadways). Vertical and horizontal controls will be established using existing benchmarks (Sheet G0001).

3.2.3 Establishing Erosion and Sediment Controls

The Site Preparation contractor will be required to establish and maintain erosion and sediment controls including managing ponded water in construction and excavation areas (Specification

Section 02270). The Site Preparation package will provide a surface water management system for STP Excavation and Trap Range Remediation. The surface water management system is designed in accordance to design standards listed in the Design Criteria Package and supporting calculations in the SWMP. From downstream to upstream, surface water management components include:

- Culvert 2 - Three (3) 36-inch Culverts placed over the existing GW-24", A1PII Sediment Basin and Principle Spillway, Twin 48-inch Culverts, and Outfall Area Ditch (Sheet G0005)
- Trap Range Ditch 1, Trap Range Ditch 2, Conveyance Channel 2 (Sheet G0004)
- Conveyance Channel 1 (Sheet G0007)

Additionally, a sediment trap will be constructed within the Outfall Area ditch certified area (Sheet G0013). The sediment trap will help reduce sediment loads to the existing tributary to Paddys Run (Storm Sewer Outfall Ditch) due to Outfall Area excavations until the A1PII Sediment Basin is completed and operational. At that time, the Sediment Trap will be removed by regrading within the certified Outfall Area.

During Site Preparation, storm water runoff collected during excavations and perched water encountered will be pumped or directed to either the sediment trap or the sediment basin for sediment removal.

3.2.4 Site Preparation

Site preparation activities will include:

- Clearing and grubbing
- Removal of pavement and existing culvert
- Removal of impacted topsoil areas
- Topsoil excavation and stockpiling

3.2.4.1 Clearing and Grubbing

Trees less than four inches in diameter, shrubs, and woody undergrowth will be removed (Specification Section 02100). A significant portion of this work will occur between the clearing limits shown (Sheet G0005) at the twin 48-inch culvert or crossing of the South Access Road. Removal of any tree greater than four inches in diameter will require advance approval from the Construction Manager. Trees with diameters greater than 12 inches will not be chipped. Rather, the branches from

these trees will be removed and chipped, and the remaining logs will be stored at the existing Southern Waste Units (SWU) wood chip stockpile for any future bioengineering needs. Vegetation will be chipped directly in trucks prior to transporting to the existing Southern Waste Units (SWU) wood chip stockpile near the Meteorological Tower (Sheet G0001). This will be the responsibility of FDF.

Resulting tree stumps will be ground in place, excavated, and transported (Specification Section 02100) to the OSDF Grubbing Pile, designated as OSD-005. Any other remaining vegetation will also be transported to the OSDF Grubbing Pile (Specification Section 02100).

3.2.4.2 Pavement and Existing Culvert Removal

A portion of the South Access Road pavement will be removed to allow installation of the twin 48-inch culverts (Sheet G0005). This includes asphalt, concrete, and aggregate base removal (Sheet G0013). Additionally, the STP Access Road pavement and aggregate base will be removed and relocated (Sheet G0004). Three existing culverts and associated headwalls will be removed (Sheet G0005). Any agricultural drainage tiles encountered will be removed (Specification 02100). Pavement, culverts (and associated headwalls), and agricultural drainage tiles will be size-reduced to meet OSDF physical Waste Acceptance Criteria (WAC) (Specification Section 02100). Soil underlying the pavement aggregate base is certified.

The resulting construction rubble will be stockpiled north of the STP, designated as Material Tracking Location (MTL) A12-009 (Sheet G0008), at the area designated for a 6-inch soil stripping during STP Excavation. If the OSDF contractor is awarded the A1PII Site Preparation work, the MTL A12-009 stockpile will be designated on the construction drawings as a contingency to hauling directly to the OSDF. Otherwise, any other site preparation contractor will haul and unload to the MTL A12-009 stockpile for the STP excavation contractor to take to the OSDF. In the event that the Site Preparation contractor cannot access the A12-009 location [because of OSDF Phase II borrowing activities or removal of STP structures by the Facilities Closure and Demolition Project (FC&DP)], the alternate location is an existing debris stockpile west of the Operable Unit 2 Haul Road designated as MTL HIS-001 (Sheet G0008).

The contractor will be required to submit for DOE approval as part of the Traffic Plan the plan to maintain or control traffic at the South Access Road crossing and the STP Access Road relocation

(Sheet G0008). The contractor will be required to install the twin 48-inch culverts and restore the South Access Road to traffic within one weekend. Anti-seep collars will consist of bentonite-soil compacted fill (Specification 02206, Part 2.1.F).

3.2.4.3 Removal of Impacted Topsoil Areas

Although all Certification Units (CUs) passed certification, the Certification Report (DOE 1998a) presents one anomaly in CU A1PII-S1-19 (Trap Range Ditch 1, Sheet G0004) and two anomalies in CU A1PII-S3-CD (Conveyance Channel, Sheets G0004 and G0007) that the Site Preparation Construction Drawings and Technical Specifications address.

In Trap Range Ditch 1 (CU A1PII-S1-19), a 16-foot radius topsoil stripping around sample #10 at a depth of six inches will be removed. This will address elevated concentrations of lead (FRL = 400 mg/kg) and arsenic (FRL = 12 mg/kg) at 1152 mg/kg and 37 mg/kg, respectively. The topsoil will be placed within the Trap Range prior to Ditch 1 construction in this area by the Site Preparation contractor by the site workforce. This topsoil and the Trap Range topsoil will be addressed during the STP Excavation.

In Conveyance Channel 1, the total uranium upper confidence level of the CU is 63.58 $\mu\text{g/g}$, which meets the 82.2 $\mu\text{g/g}$ uranium FRL objective. However, this slightly exceeds the 50 $\mu\text{g/g}$ As Low As Reasonably Achievable (ALARA) goal. Therefore, a 12-inch topsoil stripping will be excavated in the northern portion of the CU north of northing 479959 (Sheet G0007) as the results from three samples were determined to have elevated concentrations (sample #10, #11 and #16 at 51.20 $\mu\text{g/g}$, 51.20 $\mu\text{g/g}$ and 40.70 $\mu\text{g/g}$, respectively; see Certification Report for sample locations). In a separate location, a 12-inch topsoil stripping will be excavated near the STP Access Road (Sheet G0004) where the result from a sample was determined at 102 $\mu\text{g/g}$ (sample #2; see Certification Report for sample location).

In both of these 12-inch topsoil strippings areas, the topsoil will be considered impacted and placed in the West Impacted Material Stockpile or hauled directly to the OSDF for placement (Specification Section 02100) if the OSDF contractor is awarded the A1PII Site Preparation work.

3.2.4.4 Topsoil Excavation and Stockpiling

Six inches of topsoil, outside the three anomalies described above, will be removed within certified areas (where OSDF borrowing activity has not yet removed) and stockpiled at the OSDF Soil Pile OSD-004 (Specification Section 02100).

3.3 EXCAVATION AND INSTALLATION OF STRUCTURES

All excavations will occur in the following areas and will be described in the Site Preparation contractor's Earthwork Work Plan:

- Certified Area Excavation
- Uncertified Area Excavation at the Outfall Area Ditch
- Certified Compacted Fill Berm in the Uncertified Area north of Conveyance Channel 1

3.3.1 Certified Area Excavation

Certified area topsoil excavation and stockpiling has been described above. Excavated subsoil within certified areas will be transported by the A1PII Site Preparation contractor to the location of the OSDF Phase II contractor screening operations and staged in 5,000 to 6,000-cubic yard working piles (Sheet G0008). The OSDF Phase II contractor will be responsible for stabilizing these working piles. Additionally, the A1PII Site Preparation contractor will transport the existing stockpile (SPO-014) from the Outfall Area to the OSDF Phase II contractor screening operations.

3.3.2 Uncertified Area Excavation at the Outfall Area Ditch

The contractor will excavate and regrade the area at the Outfall Area Ditch confluence with the existing ditch (Sheet G0013) from the existing uncertified ditch. Excess uncertified soil will be regraded at the top of the south bank within uncertified areas previously disturbed during the installation of the existing GW-20" and GW-10" pipelines.

In addition, the A1PII Site Preparation Contractor may be directed to excavate and relocate the existing stockpile (SPO-019) to either the OSDF Phase II contractor screening operations or to the OSDF Soil Pile. This option will be discussed with EPA and OEPA prior to sampling and relocation.

3.3.3 Certified Compacted Fill Berm in the Certified Area North of Conveyance Channel 1

The Contractor will use fill from certified area excavations to complete the berm north of Conveyance Channel 1.

3.4 MATERIAL HANDLING

As stated in the Construction Drawings (Sheet G0009), the Contractor will provide the Construction Manager daily with the quantity, material type, source location material tracking location and destination material tracking location of all materials moved between material tracking locations. Soil moved within a material tracking location does not need to be tracked. This information will be transmitted daily from the Construction Manager to the field representation of Waste Acceptance Organization for documentation on the Field Tracking Log.

3.5 SEEDING ACTIVITIES

Seeding activities include soil preparation, interim seeding, fertilizer, mulch and binder, and use of a crusting agent (Specification 02900) consistent with Sitewide Excavation Plan requirements. The channel and sedimentation basin are expected to be excavated and recertified within two years, hence interim seeding is appropriate in these areas.

4.0 SCHEDULE

Schedule dates are shown in Attachment II. Presently, Site Preparation construction activities are commencing after the conclusion of OSDF borrowing activities. However, every effort will be made to award the contract earlier to take advantage of better weather months.

Should the OSDF borrowing activity schedule extend beyond its planned finish date while the Site Preparation contractor is mobilizing, the Site Preparation contractor will be directed to start work in the Outfall Area and the Conveyance Channel 1 or Trap Range ditch area. This will allow for site preparation work to be initiated while OSDF borrowing activities continue to completion.

The only FC&DP activity that could impact Site Preparation work is a delay in the Skeet Range Building take-down. This would impact the Trap Range ditch installation. The Site Preparation contractor will be directed to work in other A1PII Site Preparation areas until FC&DP completes its activity.

Only one site preparation activity has been identified as potentially impacting the FEMP mission. This is the twin 48-inch culvert crossing at the South Access Road. It is currently planned that this work will occur over the weekend beginning on a Friday. Only those sections of 48-inch culverts will be installed such that at least one lane of traffic will be open by Monday morning. Additionally, it is intended for this work to be scheduled around a three-day weekend to allow the Site Preparation contractor an additional workday.

REFERENCES

U.S. Department of Energy, 1997a, "Area 1, Phase II Implementation Plan," 20710-PL-0003, Revision C Draft, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1997b, "Technical Specifications," 20710-TS-0002, Revision C Draft, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1997c, "Design Criteria Package," 20710-DC-0001, Revision E Draft, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1997d, "Surface Water Management Plan," 20710-PL-0001, Revision C Draft, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1997e, "Systems Plan," 20710-PL-0003, Revision C Draft, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998a, "Certification Report for Area 1 Phase II - Sector 1, 2a and Conveyance Ditch," 20710-RP-0008, Final, DOE, Fernald Area Office, Cincinnati, OH.

U.S. Department of Energy, 1998b, "Sitewide Excavation Plan," 2500-WP-0028, Final, DOE, Fernald Area Office, Cincinnati, OH.

Attachment I

Summary Of Modifications Since November 1997 A1PII Submittal

Item No	Site Preparation Scope Item	Comment
1.	Contractor Support Area	MODIFIED; Contractor Support Area will be in uncertified area yet to be determined
2.	Conveyance Channel 1	MODIFIED; Approx 34' wide, 8' deep channel from 90% submittal revised to an approx. 8' side, 3' deep channel with berms in the Pre-CFC Package due to reduction in contributing Drainage Areas (e.g., Channel 2)
3.	Underground Utility Removals	Scope placed in STP Excavation package. Bottom of Conveyance Channel 1 will be above underground utilities
4.	Topsoil Stockpile Area	DELETED; All Topsoil from Certified Areas, except at Outfall Area ditch confluence with existing ditch, to go to OSDF Soil Pile
5.	Trap Range Ditch 1	none
6.	Trap Range Access Road	none
7.	Trap Range Ditch 2	Rock Check dams added
8.	Borrow Area Haul Road Corridor	Location Revised from the 90% Submittal to Pre-CFC by OSDF
9.	Conveyance Channel 2	NEW SCOPE; Replaces 3 pipes formerly known as Culvert 1
10.	Exist STP Access Road Removal at North Entrance Road	NEW SCOPE; Removing 4 existing culverts at or near existing STP Access Road previously not identified in the 90% submittal
11.	Relocated STP Access Road	MODIFIED; Some grading rework necessary due to Culvert 2 going over GW-24" in Pre-CFC Package
12.	Guardrail at STP Access Road	DELETED; No longer needed
13.	OSDF [Construction] Water Well Access Road	none
14.	Culvert 1	DELETED; Replaced by Conveyance Channel 2 in Pre-CFC Package
15.	Culvert 2	MODIFIED; 5 Culverts in 90% Submittal replaced by 3 Culverts in Pre-CFC Package due to culverts going over, not under GW-24". Therefore, "Flowable Fill" and "Temporary supporting of GW-24" eliminated.
16.	A1PII Sediment Basin 1	MODIFIED; Flat-bottom sump provided in Pre-CFC Package for better sediment collection. OSDF Phase II contractor will be excavating for borrow to approx 1' of final grade.
17.	Principle Spillway	MODIFIED; 36" Diameter section in 90% Submittal modified to a 48" Diameter section to improve constructability with present 48" Diameter Riser
18.	Anti-Seep Collars	MODIFIED; collars in 90% Submittal modified to bentonite plugs to improve constructability during South Access Road closure (Weekend work)
19.	Headwall	DELETED; replaced with riprap to reduce concrete waste

Attachment I **Summary Of Modifications Since November 1997 A1PII Submittal**

Item No	Site Preparation Scope Item	Comment
20.	Six Certified Soil Stockpile Areas South of A1PII Sediment Basin 1	REMOVED; Soil (other than topsoil) from Certified Areas will go to OSDF Phase II Screening Operations
21.	South Access Road Guardrail and Bypass Lane	DELETED; Contractor will be directed in Contract Documents that the section of twin 48" Diameter under the South Access Road will be done over a weekend. Contractor's plan will be a submittal to FDF for approval
22.	Outfall Area Sediment Trap	NEW SCOPE; Added for erosion control until the A1PII Sediment Basin 1 is operational
23.	Certified Soil Stockpile Area in Outfall Area	MODIFIED; Certified Stockpile in the 90% Submittal will be removed. Pre-CFC Submittal will show existing Stockpile (that was sampled for Cert.) To be relocated to the OSDF Phase II Screening Operations
24.	Material Tracking Plan	MODIFIED; Reflects Site Preparation Work
25.	Access Control Gate	DELETED; Due to the project's remote location, rope fences can be used in lieu of construction fencing. The installation of galvanized steel swing gates on 4-inch diameter, concrete-filled, steel posts would therefore not appear to be feasible when installed within a rope fence.

1674

Activity ID	Description	Dur	Start	Finish	1998							1999						
					SEP	OCT	NOV	DEC	JAN	FEB	MAR	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1	Notice to Proceed	0	21SEP98		◆ Notice to Proceed													
1.1.A	Pre-Authorization to Mobilize Submittals	13	21SEP98	12OCT98	Pre-Authorization to Mobilize Submittals													
1.1.B	General Project Submittals	30	21SEP98	10NOV98	General Project Submittals													
1.1.C	Review and Approve Pre-ATM Submittals	8	13OCT98	26OCT98	Review and Approve Pre-ATM Submittals													
2M	Authorization to Mobilize	0	26OCT98		◆ Authorization to Mobilize													
1.2	Off-hours Dust Control Allowance	22	26OCT98	03DEC98	Off-hours Dust Control Allowance													
2.1	Mobilization	5	26OCT98	02NOV98	Mobilization													
2.12	Surveying	22	26OCT98	03DEC98	Surveying													
2.2	Control and Management	22	26OCT98	03DEC98	Control and Management													
2.3	Erosion and Sediment Controls	3	26OCT98	28OCT98	Erosion and Sediment Controls													
2.4	Site Clearing and Chipping	2	29OCT98	02NOV98	Site Clearing and Chipping													
2.14	Temporary Stabilization	15	03NOV98	01DEC98	Temporary Stabilization													
2.5	Road Construction	10	03NOV98	19NOV98	Road Construction													
2.6	Stockpile Excavation	5	03NOV98	10NOV98	Stockpile Excavation													
2.7	Outfall Ditch	10	05NOV98	24NOV98	Outfall Ditch													
2.13	Demolition of STP Access Road	2	12NOV98	16NOV98	Demolition of STP Access Road													
2.8	A1P11 Sediment Basin	4	23NOV98	30NOV98	A1P11 Sediment Basin													
2.9	Principle Riser Pipe and Discharge Pipes	8	25NOV98	09DEC98	Principle Riser Pipe and Discharge Pipes													
2.10	Twelve (12) Inches of Impacted Material Excav	2	01DEC98	02DEC98	Twelve (12) Inches of Impacted Material Excav													
2.11	Conveyance Channel and Ditches	10	03DEC98	21DEC98	Conveyance Channel and Ditches													
2.15	Permanent Seeding	2	22DEC98	23DEC98	Permanent Seeding													
2.16	Demobilization	2	28DEC98	29DEC98	Demobilization													
1.3	Close-Out Documents	30	30DEC98	22FEB99	Close-Out Documents													
3M	Site Prep Complete	0		22FEB99	Site Prep Complete ◆													

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1994

Project Start 01SEP98
Project Finish 22FEB99
Data Date 01SEP98
Run Date 24AUG98

SITE

A1P11 Site Preparation Construction Schedule Attachment II

Sheet 1 of 1



FERNALD
Environmental Management Project